

IN THE CLAIMS:

Please enter the following set of claims. In this set of claims, claims 1, 2, 4, 5, and 11 are amended, and new claims 13-24 are added. Status indicators are provided for all claims.

1. (Currently Amended) A method for bonding an adherent member to a printed circuit board comprising ~~the steps of~~:

providing the printed circuit board having a substrate and a plurality of a first conductive pattern group formed at a peripheral portion of the substrate in the direction of the length of the substrate wherein an alignment characteristic of the first conductive pattern group is adjusted determined, at least in part, according to a thermal expansion degree of the substrate where the first conductive pattern group is positioned;

providing the adherent member having a plurality of a second conductive pattern group corresponding to the first conductive pattern group;

aligning the adherent member and the printed circuit board with each other; and

bonding the adherent member to the printed circuit board by a thermo-compression bonding method.
2. (Currently Amended) The method of claim 1, wherein ~~the adjusted amount~~ the determined alignment characteristic of the first conductive pattern group has the largest value at both ends of the substrate and the ~~adjusted amount~~ determined alignment characteristic of the first conductive pattern group decreases toward a point dividing the substrate into two portions.

3. (Original) The method of claim 1, wherein a thermal reaction property of a first half portion of the substrate is different from a thermal reaction property of a second half portion of the substrate when the substrate is divided lengthwise.

4. (Currently Amended) The method of claim 3, wherein ~~an adjusted amount~~ the determined alignment characteristic of the first conductive pattern group positioned at the first portion of the substrate is larger ~~toward the point~~ than ~~an adjust amount~~ the determined alignment characteristic of the first conductive pattern group positioned at the second portion of the substrate, wherein the thermal reaction property of the first portion of the substrate is larger than the thermal reaction property of the second portion of the substrate.

5. (Currently Amended) The method of claim 3, wherein intervals among the first conductive pattern group positioned at the first portion of the substrate is are larger than intervals among the first conductive pattern group positioned at the second portion of the substrate, wherein the thermal reaction property of the first portion of the substrate is larger than the thermal reaction property of the second portion of the substrate.

6. (Original) The method of claim 1, wherein the thermo-compression bonding is performed through interposing an anisotropic conductive film between the printed circuit board and the adherent member.

7. (Currently Amended) The method of claim 1, wherein the second conductive pattern group has intervals aligned with the first conductive pattern group before the alignment characteristic of the first conductive pattern group is adjusted determined.

8. (Original) The method of claim 1, wherein the thermo-compression bonding is performed at a temperature of about 140 to 200 °C.
9. (Original) The method of claim 1, wherein the printed circuit board is connected to a thin film transistor substrate of a liquid crystal display device.
10. (Original) The method of claim 1, wherein the adherent member is a tape carrier package.
11. (Currently Amended) A liquid crystal display device, comprising:
a liquid crystal display panel having a thin film transistor substrate and a color filter substrate attached to the thin film transistor substrate by interposing a liquid crystal between the color filter substrate and the thin film transistor substrate;
a printed circuit board electrically connected to the liquid crystal display panel;
and
an adherent member electrically connecting the liquid crystal display panel to the printed circuit board to operate the liquid crystal display panel, the adherent member attached to the printed circuit board by a thermo-compression bonding method,
wherein a thermally expanded misalignment amount of a conductive pattern group of an output of the printed circuit board is ~~identical to a misalignment amount of~~ substantially in alignment to a conductive pattern group of an input of the adherent member.
12. (Original) The liquid crystal display device as claimed in claim 11, wherein a thermal reaction property of one half portion of the printed circuit board is different from a thermal reaction property of the other half portion of the printed circuit board when dividing the printed circuit board lengthwise.

13. (New) The method of claim 1, wherein the alignment characteristic comprises one or more of a position of the first conductive pattern group and a position of elements within the first conductive pattern group.

14. (New) The method of claim 13, wherein the alignment characteristic is determined with respect to an original alignment characteristic of the first conductive pattern group that is determined without considering the thermal expansion degree of the substrate.

15. (New) A method for manufacturing a bonded adherent member and printed circuit board, comprising:

forming a first conductive pattern group on the printed circuit board in accordance with the thermal expansion properties of the printed circuit board such that intervals between ones of the first conductive pattern group are smaller than intervals between ones of a corresponding second conductive pattern group provided on the adherent member;

thermocompression bonding the adherent member and the printed circuit board;
and

during the thermocompression bonding, allowing the printed circuit board to expand such that the first conductive pattern group is substantially aligned with the second conductive pattern group.

16. (New) The method of claim 15, wherein the adherent member is a tape carrier package.

17. (New) The method of claim 15, further comprising, before said forming, measuring the thermal expansion properties of the printed circuit board.

18. (New) The method of claim 15, wherein the intervals between ones of the first conductive pattern group are asymmetric when the printed circuit board is asymmetric.

19. (New) A printed circuit board that is to be electrically connected to an external device through a plurality of connection ports spaced apart part from each other, the printed circuit board comprising:

a substrate; and

a plurality of printed circuit board land groups formed on the substrate, each one of the printed circuit board land groups corresponding one-to-one with one of the connection ports of the external device, an interval between the printed circuit board land groups being smaller than an interval between the connection ports.

20. (New) The printed circuit board of claim 19, wherein a tape carrier package electrically connects the external device and the printed circuit board.

21. (New) The printed circuit board of claim 20, wherein the interval between the printed circuit board land groups becomes substantially same as the interval of the connection ports by thermal expansion when the printed circuit board undergoes a thermo-compression bonding process to create an electrical connection between the tape carrier package and the printed circuit board.

22. (New) The tape carrier package of claim 19, wherein the interval between the printed circuit board land groups is asymmetric when the printed circuit board is asymmetric.

23. (New) A method of manufacturing a printed circuit board that is to be electrically connected to an external device through a plurality of connection ports spaced apart from each other, comprising:

forming printed circuit board land groups that correspond one-to-one with each of the connection ports of the external device on a substrate such that an interval between the printed circuit board land groups is smaller than an interval between the connection ports.

24. (New) The method of claim 23, wherein the interval between the printed circuit board land groups is determined by:

measuring an amount of total thermal expansion of the substrate under a thermo-compression bonding process, and

obtaining the interval between the PCB land groups by considering the amount of total thermal expansion.